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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,098	02/21/2002	Harry Fisch	7202-227	4354

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EXAMINER
HENLEY III, RAYMOND J

ART UNIT	PAPER NUMBER
1614	4

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
10/081,098	Harry Fisch
Examiner	**Art Unit**
Ray Henley	1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-22 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

CLAIMS 1-22 ARE PRESENTED FOR EXAMINATION

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to make reference to the subject matter of claims 12-22, i.e., the treatment of Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function and weight gain that is not related to male menopause.

Claim Rejection - 35 USC § 112, First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

II ***Enablement***

Claims 12-22 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the treatment of Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function or weight gain which are related to male menopause which involves the administration of an antiestrogen compound , does not reasonably provide enablement for the

treatment of Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function or weight gain which are ***not*** related to male menopause which involves the administration of an antiestrogen compound . The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Wands, 8 USPQ2d 1400 (Fed. Cir. 1988). Among these factors are: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary.

When the above factors as applied to the present application (see below) are weighed, it is the examiner's position that the present specification would only enable the skilled artisan to the treat Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function or weight gain which are related to male menopause which involves the administration of an antiestrogen compound.

(1) The nature of the invention.

At page 4 of the present specification, last paragraph, the broadest aspect of Applicant's invention is described. Therein, it is set forth "The object of the present invention is to treat a

relative androgen deficiency in older men and/or the specific disorders related to male menopause by the use of antiestrogens" (first sentence under the heading "Summary of the Invention". Claims 12-22, however, are directed to the treatment of Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function or weight gain which involves the administration of an antiestrogen compound. In these claims, there is no limitation relating the etiology of the disease/disorder to androgen deficiency or male menopause.

(2) The state of the prior art.

The prior art well recognizes the treatment of disorders related to male menopause, also known as andropause. See Basaria et al. (Examiner's cited reference "U" and Lund et al. (Examiner's cited reference "V") which are review articles of the condition or male menopause or andropause and include treatment suggestions which include testosterone replacement therapy.

The prior art also well recognizes the treatment of cognitive disorders and Alzheimer's disease (see U.S. Patent No. 5,434,177, issued to Riekkinen et al., Examiner's cited reference "C"), insulin resistance, type 2 diabetes and obesity, i.e., weight gain (see U.S. Patent No. 5,866,584 issued to Cincotta et al., Examiner's cited reference "B" and The Merck Manual, Examiner's cited reference "W" (only regarding obesity)).

In the art directed to cognitive disorders, Alzheimer's disease, insulin resistance, type 2 diabetes and obesity, i.e., weight gain there simply is no teaching or suggestion which would, without a showing of data, imbue the skilled artisan to accept on its face that cognitive disorders,

Alzheimer's disease, insulin resistance, type 2 diabetes and obesity, i.e., weight gain, regardless of it's etiology (which is encompassed by the present claims) could be treated with any one specific class of therapeutic agents, much less antiestrogen compounds. In support of this conclusion made by the Examiner, see, Cincotta et al. who teach that obesity, insulin resistance and type 2 diabetes may be treated with dopamine agonists (see, for example, the abstract). Riekkinen et al. teach that in the treatment of age-related cognitive disorders, certain imidazole derivatives are effective because they are potent and selective α_2 adrenergic receptor antagonists (see the abstract and column 1, lines 6-36, for example). At pages 920-921, The Merck Manual describes several treatment modalities, including medications, i.e., amphetamine or amphetamine-like compounds, physical activity, surgery, jaw wiring, behavior modification and self-help organizations.

(3) The relative skill of those in the art.

The relative skill of the those in the art is high.

(4) The predictability or unpredictability of the art.

The unpredictability of pharmaceutical chemistry and medicine art is very high. It is well recognized that the treatment of a specific patient suffering from a specific disease with a specific etiology and pathophysiology may vary due to the vary idiosyncratic nature of human beings, or other patients being treated. For example, a patient may present with an infection that should, by what is known concerning the pathogen, readily treated with a penicillin-type antibiotic. However, one can not say with certainty that such treatment would be effective.

There exists many confounding factors such as the sensitivity of the specific pathogen to the antibiotic, the patients health condition which may preclude the administration of such types of antibiotics, e.g., due to allergies.

(5) The breadth of the claims.

Claims 12-22 are directed to the treatment of Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function or weight gain which involves the administration of an antiestrogen compound. In these claims, there is no limitation relating the etiology of the disease/disorder to androgen deficiency or male menopause.

(6) The amount of direction or guidance presented.

The entirety of the direction and/or guidance presented in the present specification is directed to the object of the invention which is set forth at page 4 of the present specification, last paragraph, i.e., "The object of the present invention is to treat a relative androgen deficiency in older men and/or the specific disorders related to male menopause by the use of antiestrogens" (first sentence under the heading "Summary of the Invention". The specification is silent with respect to the treatment of disorders not related to male menopause.

(7) The presence or absence of working examples.

The present specification contains no working examples of the invention.

(8) The quantity of experimentation necessary.

Because of the unpredictability of the art, see (4) above, and the lack of direction or guidance provided, see (6) above, it is believed that undue experimentation would be necessary to practice the invention of the scope claimed.

Accordingly, claim 46 is deemed to be properly rejected under 35 U.S.C. 112, first paragraph.

Double Patenting

Claims 1-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4 and 11-14 of U.S. Patent No. 6,391,920 (Fisch) in view of applicants' acknowledgment at page 3, last paragraph - page 4, first full paragraph of the present specification.

The present claims are directed to the treatment of Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function or weight gain which involves the administration of an antiestrogen compound and wherein the Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function or weight gain is related to male menopause in men. Clomiphene, tamoxifen and tamoxifen citrate are identified as the antiestrogen compounds.

Claims 4 and 11-14 of U.S. Patent No. 6,391,920 (Fisch) are directed to the treatment of disorders related to male menopause in men comprising the administration of an antiestrogen

compound. Claims 11-14 thereof identify clomiphene, tamoxifen and tamoxifen citrate as antiestrogen compounds.

The difference between the present claims and the patented claims lie in that the patented claims fail to identify Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function or weight gain as disorders related to male menopause in men.

However, to the skilled artisan, applicant's invention would have been obvious because:

(1) as acknowledged at pages 3-4 of the present specification, Alzheimer's disease, a decline in cognitive function, obesity, insulin resistance and type 2 diabetes have been linked with a testosterone in such a manner that the skilled artisan would have had at least a reasonable expectation that Alzheimer's disease, insulin resistance, type 2 diabetes, decline in cognitive function or weight gain are disorders that could be related to male menopause in men.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Accordingly, for the above reasons, the claims are deemed to be properly rejected and none are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ray Henley whose telephone number is (703) 308-4652.

RAYMOND HENLEY, III
PRIMARY EXAMINER
GROUP 1600

Henley;rjh
July 7, 2003